PTO/SB/08A (08-03)

Approved for use through 07/31/2008, OMB 0851-0031
U.S. Patent and Trademark Office; U.S. DEPARTMENT OF COMMERCE
Under the Paperwork Reduction Act of 1995, no persons are required to respond to a collection of information unless it contains a valid OMB control number.
Substitute for form 1448/PTO
Complete if Known

Sheet 1

## INFORMATION DISCLOSURE STATEMENT BY APPLICANT

(Use as many sheets as necessary)

Application Number 10/717,086 Filing Date November 19, 2003 First Named Inventor Charles Q. Zhan Art Unit 2863 **Examiner Name** Xiuqin Sun Attorney Docket Number 120 06739US

| Exeminer   Cite   Document Number   Budgetto Data |      |   |                             |   |   |  |
|---|------|---|-----------------------------|---|---|--|
| thillels*   | No.' | Decument Number  Number-Kind Cade <sup>2 (Farmer)</sup> | Publication Date MM-DD-YYYY | Name of Patentice or<br>Applicant of Cited Document | Pages, Columns, Lines, Where<br>Rolevant Passages of Rolevant<br>Figures Appage |  |
|   | AA   | <sup>US-</sup> 5,381,697                                | 01/17/1995                  | van der Pol   |   |  |
|   | AB   | <sup>US-</sup> 5,594,180                                | 01/14/1997                  | Carpenter et al.                                    |   |  |
|   | AC   | <sup>US-</sup> 5,641,891                                | 06/24/1997                  | Frankl et al.                                       |   |  |
|   | AD   | <sup>US-</sup> 5,966,674                                | 10/12/1999                  | Crawford et al.                                     | <del></del>   |  |
|   | AE   | <sup>US-</sup> 6,208,943                                | 03/27/2001                  | Randolph et al.                                     |   |  |
| _   | AF   | <sup>US-</sup> 6,408,676                                | 06/25/2002                  | Stratton et al.                                     | <del></del>   |  |
|   | AG   | <sup>US-</sup> 6,505,517                                | 01/14/2003                  | Eryurek et al.                                      |   |  |
|   | AH   | <sup>US-</sup> 6,539,315                                | 03/25/2003                  | Adams et al.  | <del>                                     </del>                                |  |
|   | Al   | <sup>US-</sup> 6,654,697                                | 11/25/2003                  | Eryurek et al.                                      | <del></del>   |  |
|   | AJ   | <sup>US-</sup> 6,725,167                                | 04/20/2004                  | Grumstrup et al.                                    | <del> </del>  |  |
|   |      | US-   |                             |   |   |  |
|   |      | uş-   |                             |   | ·   |  |
|   |      | US-   |                             |   |   |  |
|   |      | UŞ.   |                             |   |   |  |
|   | _    | US-   | †                           |   |   |  |
|   |      | US-   |                             |   |   |  |
|   |      | US-   |                             |   | <del> </del>  |  |
|   |      | U8-   | <del> </del>                |   | <del></del>   |  |
|   |      | US-   | <del> </del>                |   | <del></del>   |  |

|                       |              | FORE   | GN PATENT DOCU      | MENTS  |   |   |
|-----------------------|--------------|--|---------------------|--|---|---|
| Examiner<br>Initials* | Cite<br>No.1 | Foreign Peteri Document  Country Code* Number **Kind Code*(#Ancum) | Publication<br>Date | Name of Patentee or<br>Applicant of Cited Decument | Pages, Columns, Lines,<br>Where Relevant Passages<br>Or Relevant Figures Appear | T |
|                       |              |  | MM-DD-YYYY          |  |   | ד |
|                       |              |  |                     |  |   |   |
|                       |              |  |                     |  |   |   |
| _                     |              |  |                     |  |   |   |
|                       |              |  |                     |  |   |   |
|                       | _            |  |                     |  |   | L |
|                       |              |  |                     |  | i   | Г |

Exeminer Considered

\*EXAMINER: Initial if reference considered, whether or not clietten is in conformance with MPEP 609, Draw line through citation if not in conformance and not considered, include capy of this form with next communication to applicant. 'Applicant's unique clietten designation number (optional). 2 See Kinds Codes of USPTO Patent Documents at www.usrio.gov or MPEP 801.04. 3 Enter Office that issued the document, by the two-latter code (WIPO Standard ST.3). \*For Japaneso patent documents, the indication of the year of the reign of the Emperor must precede the serial number of the patent document. \*Kind of document by the patent document in the document under WIPO Standard ST.16 if possible. \*Applicant is to place a chack mark ners if English tanguage

Trais collection of information is required by 37 CFR 1.97 and 1.98. The information is required to obtain or retain a banefit by the public which is to file (and by the USPTO to process) an application. Confidentially is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete the complete deplication form to the USPTO. Time will vary depending upon the individual case. Any comments on the smount of time you require to complete their form entire suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Officer, P.O. 80x 1450, Alexandris, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Commissioner for Patents, P.O. Box 1460, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.

|          | PT                         | O/88/088  | (08-0 |
|----------|----------------------------|-----------|-------|
| Approved | for use through 07/31/2006 | . OMB 085 | 1-003 |
|          | M                          |           |       |

| Substitute for form 1449/PTO      | The state of the s | of information upless it contains a valid OMS control number.  Complete if Known |
|-----------------------------------|--|--|
|                                   | Application Number   | 10/717,086   |
| INFORMATION DISCLOSURE            |  | November 19, 2003  |
| STATEMENT BY APPLICANT            | First Named Inventor   | Charles Q. Zhan  |
| (Use as many shoots as necessary) | Art Unit   | 2863   |
|                                   | Examiner Name  | Xluqin Sun   |
| Sheet 2 of 2                      | Attorney Docket Number   | 120 06739U\$   |

| Examiner                              | Cite | NON PATENT LITERATURE DOCUMENTS Include name of the author (in CAPITAL LETTERS), title of the article (when appropriate), title of   | т.        |
|---------------------------------------|------|--|-----------|
| Initials*                             | No.1 | number(s), publisher, city and/or country where published.   | T         |
| · · · · · · · · · · · · · · · · · · · | ВА   | Fujun He et al. "WPT-SVMs Based Approach for Faull Detection of Valves in Reciprocating Pumps", Proceedings of the American Control Conference, Anchorage, AK, May 8-10, 2002, Pp. 4566-4570.                            |           |
|                                       | BB   | Jiang Waniu et al., "Applying Multiresolution Analysis for Processing of Hydraulic Pump Fault Signal", April 2001, Pp. 1-5.  |           |
|                                       | вс   | Wang et al., "The Fault Character of the Motors Identified Based on Wavelet Transform", November 2-5, 2003, Proceedings of the Second International Conference on Machine Learning and Cybernetics, Xi'an Pp. 2394-2398. |           |
|                                       | BD   | Mallat et al., "Singularity Detection and Processing with Wavaleta", March 1992, IEEE Transactions on Information Theory, Vol. 38, No. 2, Pp. 617-643.   |           |
|                                       |      |  |           |
|                                       |      |  |           |
| `                                     | •    |  |           |
|                                       |      |  | -         |
|                                       | ·    |  | <u></u> : |
|                                       |      |  | _         |

|  |            | <br> |  |
|--|------------|------|--|
| Examiner   |            | <br> |  |
|  | Date       | <br> |  |
| Signature  |            |      |  |
|  | Considered |      |  |
| THE RESERVE AND ADDRESS OF THE PERSON ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON AND ADDRESS OF THE PERSON ADDRESS OF THE P |            |      |  |

EXAMINER: Initial if reference considered, whether or not clistion is in conformance with MPEP 608. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to applicant.

1 Applicant's unique citation designation number (optional). 2 Applicant is to piece a check mark here if English language Translation is estached.

This collection of Information is required by 37 CFR 1.98. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentially is governed by 35 U.S.C. 122 and 37 CFR 1.14. This collection is estimated to take 2 hours to complete, including gethering, properting, and submitting the completed application from to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing linis burden, should be sent to the Chief information Officer, U.S. Petent and Trademark Office, P.O. Gox 1430, Alexandria, VA 22313-1450.

Commissioner for Patenta, P.O. Box 1450, Alexandria, VA 22313-1450.

If you need assistance in completing the form, call 1-800-PTO-9199 (1-800-786-9199) and select option 2.